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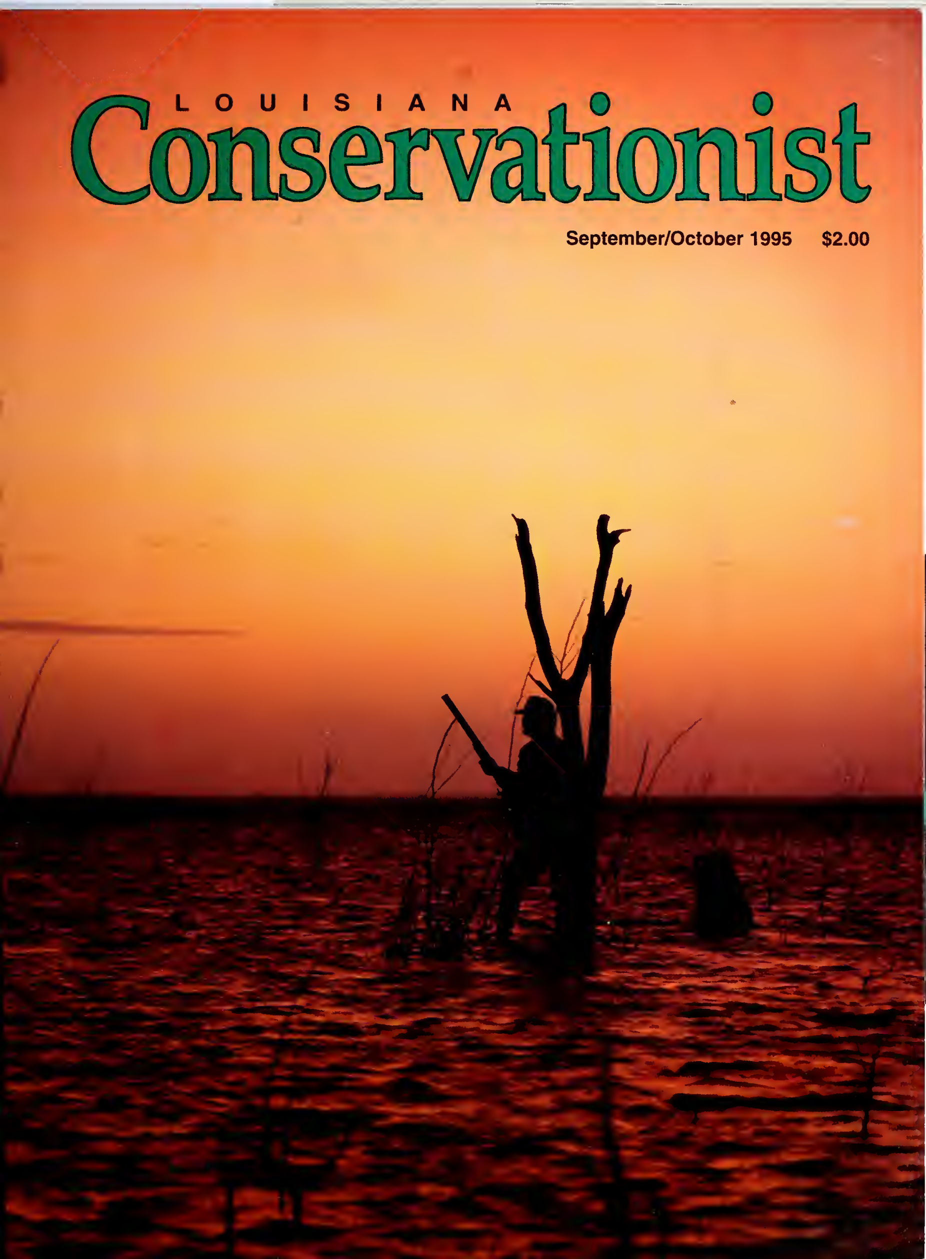

Joe L. Herring, Secretary

he 1995 legislative session produced some good news for the Department of Wildlife and Fisheries. A Wild Turkey Stamp was created with the full support of turkey hunters throughout the state. The stamp will be required in addition to Basic and Big Game hunting licenses beginning with the 1996 season. Revenues, which represent yet another example of sportsmen supporting wildlife management and conservation, will allow continuation of our highly successful Wild Turkey restoration and enhancement work.

Two pieces of legislation enhance our land acquisition program, which is designed to ensure that our citizens have permanent access to varied and rewarding outdoor recreation opportunities. The Department received authority to swap a parcel of land in the Wham Brake area of northeast Louisiana for property on Black Bayou Lake near Monroe. In addition, state bond money was approved to acquire Black Bayou Lake itself. This will provide greatly enhanced recreation opportunities in the northeastern portion of the state.

Other legislation allows Lifetime License holders to use muzzleloading firearms without having to purchase a separate muzzleloader license. This corrects a technical oversight in the original Lifetime License legislation. Still another act strengthens our Wild Louisiana Stamp requirement for persons using Wildlife Management Areas who do not possess a fishing or hunting license. That act ensures the Wild Louisiana Stamps will be more readily available to WMA visitors.

Legislation was also enacted to streamline and improve our regulations governing the transport and sale of game fish fingerlings by the state's fish farmers. The legislation reduces unnecessary regulatory burdens and makes our regulations more equitable in comparison with those of other states.

Another piece of legislation promises to be of great value to us in the future. That act increases the cap on the Rockefeller Refuge investment fund from $30 million to $50 million dollars. The investment fund, derived from mineral royalties generated on the refuge, is dedicated in perpetuity to the support of the refuge and the array of research activities performed there. Only the interest generated by the fund can be utilized, and the expansion of the fund itself will allow continued and improved refuge maintenance and research. More importantly, it provides the refuge with a buffer against future inflation.

Finally, in the not-so-good category, a proposed amendment to the state's constitution would inject the Legislature into the business of enacting and defining fish and wildlife regulations and crimes, and controlling fish, wildlife and habitat conservation programs. Let us hope the citizens of Louisiana will quickly recognize the dangers inherent in such a scheme and defeat that proposed Constitutional Amendment.

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LDWF file photo

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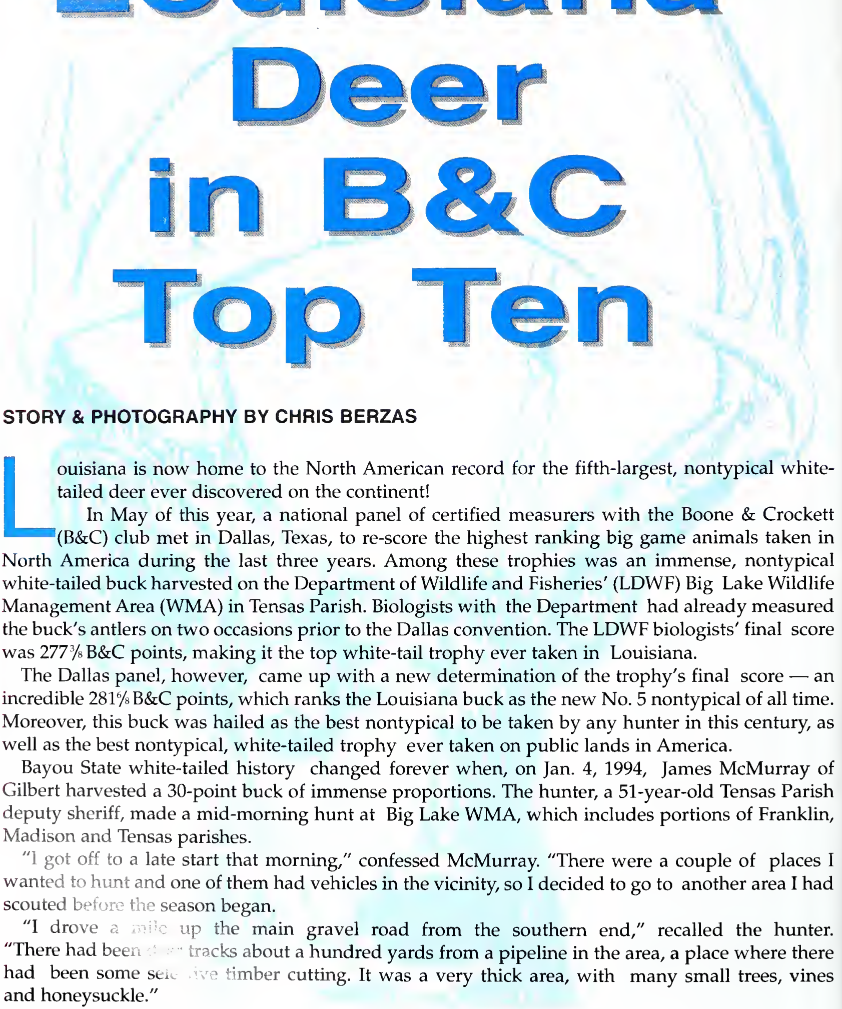
Published by the Department of Wildlife and Fisheries in the interest of conservation of Louisiana natural resources.

Louisiana Deer in B&C Top Ten



STORY & PHOTOGRAPHY BY CHRIS BERZAS

Louisiana is now home to the North American record for the fifth-largest, nontypical white-tailed deer ever discovered on the continent!

In May of this year, a national panel of certified measurers with the Boone & Crockett (B&C) club met in Dallas, Texas, to re-score the highest ranking big game animals taken in North America during the last three years. Among these trophies was an immense, nontypical white-tailed buck harvested on the Department of Wildlife and Fisheries' (LDWF) Big Lake Wildlife Management Area (WMA) in Tensas Parish. Biologists with the Department had already measured the buck's antlers on two occasions prior to the Dallas convention. The LDWF biologists' final score was 277$\frac{3}{8}$ B&C points, making it the top white-tail trophy ever taken in Louisiana.

The Dallas panel, however, came up with a new determination of the trophy's final score — an incredible 281$\frac{6}{8}$ B&C points, which ranks the Louisiana buck as the new No. 5 nontypical of all time. Moreover, this buck was hailed as the best nontypical to be taken by any hunter in this century, as well as the best nontypical, white-tailed trophy ever taken on public lands in America.

Bayou State white-tailed history changed forever when, on Jan. 4, 1994, James McMurray of Gilbert harvested a 30-point buck of immense proportions. The hunter, a 51-year-old Tensas Parish deputy sheriff, made a mid-morning hunt at Big Lake WMA, which includes portions of Franklin, Madison and Tensas parishes.

"I got off to a late start that morning," confessed McMurray. "There were a couple of places I wanted to hunt and one of them had vehicles in the vicinity, so I decided to go to another area I had scouted before the season began.

"I drove a mile up the main gravel road from the southern end," recalled the hunter. "There had been deer tracks about a hundred yards from a pipeline in the area, a place where there had been some selective timber cutting. It was a very thick area, with many small trees, vines and honeysuckle."

McMurray remembers setting out a few film canisters containing Doe-In-Heat scent prior to climbing 10 feet up a tree to get a better vantage point to see into the thick area. Once aloft, the hunter also sprinkled a cover scent on his own clothing as an additional precaution.

He was bent upon a determined strategy on the day of this hunt, one that would employ rattling a pair of antlers while emitting a series of deer grunts on a manufactured call. The sequence was very simple. "I'd rattle and grunt a few times and then wait about 15 minutes."

It was following the third sequence of this technique when McMurray spied a large deer moving within a thicket. He remained still but continued to emit soft grunts. The deer responded by moving closer.

"I saw a bit of antlers above the brush and that was all I needed to know that I could legally take him," said McMurray. "I held my scope on an opening about 30 yards away from me. When the deer stepped out, I squeezed the trigger once the crosshairs were on his shoulder."

Following the shot, the deer disappeared. Feeling confident that the bullet had found its mark, the hunter waited patiently for several minutes before descending and venturing toward the area where the deer was last seen. McMurray then realized the buck had made just one final leap.

"I just stood there for a while and counted points, never really obtaining a total since I was so amazed," said the hunter. "I didn't know it was even a state record at the time."

McMurray also recalls that flakes of snow began to cover the fallen deer before he began to pull the huge trophy to his pick-up parked nearby. The snow added a tinge of mysticism to a trophy he knew he would probably never equal in his lifetime.

Arriving at the WMA check station, McMurray was hailed by Lloyd Posey, a LDWF biologist on the area. Posey noted to McMurray that he heard the hunter's shot at 9:20 a.m. Upon viewing the majestic animal, Posey confessed that he too had been hunting the same buck.

Posey estimated the deer's age to be 4½ years and its weight at 215 pounds. But it wasn't until Harold Priestly of Simmons Sporting Goods inspected and green scored the deer that McMurray realized he may have the new state record.

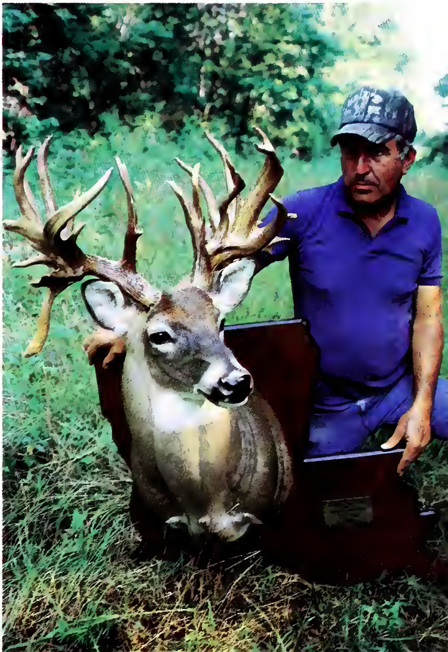
It was 60 days later when the team of three biologists mentioned earlier officially scored the deer's antlers for the Louisiana Big Game Records. After the measurement, McMurray had a hint that the white-tail may make the national top 10, and quite possibly the seventh place mark.

It wasn't until McMurray received a letter from the national Boone & Crockett office with the buck's final panel score that he finally realized the true immensity of his accomplishment. He had no idea the panel would increase that score, but he was invited to the Boone & Crockett awards ceremony in Dallas and he was determined to attend.

During the awards ceremony, McMurray's buck earned the nontypical trophy white-tail deer award. There the hunter witnessed the exhibit of world class trophies of many of the big game species of North America, and his white-tail was among the continent's best!

"This was a great day for Louisiana deer management," said Hugh "Butch" Bateman, LDWF Wildlife Division Administrator. "The results speak for themselves, and we also have to thank the biologists and specialists who work really hard at Big Lake.

"The taking of this deer is largely due to the Department's style of management on public lands," added Bateman. "We aim at keeping the deer herd at carrying capacity, thereby allowing an animal such as this to show up. And I can assure you the road to get to this point has not been easy.



James McMurray took this magnificent trophy buck from Big Lake WMA in 1994 using doe scent and a grunt call.

Perseverance has paid off, but it's really due to a growing appreciation by the general public of our style of deer management.

"We are certainly proud of our management, but the path was paved 30 to 40 years in the past when the Department took the initiative to ensure we had property and habitat. All that was needed then was a balanced approach to deer harvests."

LDWF Deer Study Leader David Moreland was equally excited about McMurray's buck. Moreland speculated that the buck's impressive score appeared to be largely due to the mass of the antlers as well as long tines. Circumferences ranging from 5 to $12^1/_8$ inches adorn the antlers with the majority of mass found in palmated beams.

Upon inspection of the official B&C score sheet, it was determined that 30 points were scorable, 14 on the right and 16 on the left. There were 18 abnormal points which accounted for $84^4/_8$ inches. Left and right main beams were $20^4/_8$ and $22^1/_8$ inches respectively. The longest tines measured 10 and $12^1/_8$ inches.

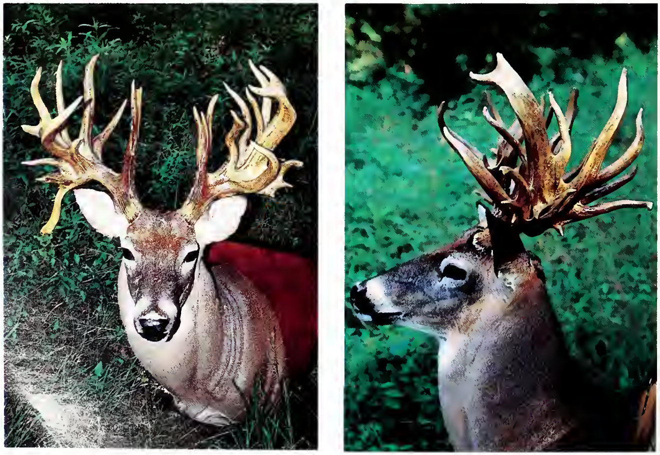
Moreland also noted the habitat as a primary factor in the possible harvest of such an animal. Big Lake WMA is mainly a very fertile, river-bottom hardwood tract surrounded by a sea of agriculture. According to Moreland, selective timber harvests also have an impact in providing both food and cover to allow such an animal to reach its full potential.

But Moreland also maintained that either-sex deer harvests in the area play a major role. "Through this type of management, we have allowed bucks to move over into older age groups, thus enabling them to produce antlers that can be quite impressive."

As for McMurray, he is extremely proud that his trophy hails from the Bayou State. And he honestly admits that he certainly was not looking for such an animal to walk into the sights of his rifle. Like most deer hunters in Louisiana, he was simply hunting venison for the table.

McMurray's story is very common in the annals of world class trophies taken by hunters throughout the United States. Until Jan. 4, 1994, however, none of these top national trophies had hailed from Louisiana. With an estimated 750,000 to 1 million white-tail deer roaming Louisiana's marshes, prairies, pine forests and hardwoods swamps, it may not take another hundred years for another such encounter to be experienced in the Bayou State.

After all, we do live in the Sportsman's Paradise. ■



The massive rack of McMurray's buck proves that proper management can enhance the quality of an area's deer population. Management of habitat, including selective timber harvests, and control of deer numbers through either-sex hunts are major factors in producing quality deer.

Photo by Gary Kramer

1995-96 Hunting Seasons Outlook

BY CLIFTON COLES

Outdoorsmen and women taking advantage of the Sportsman's Paradise will certainly find themselves challenged during the 1995-96 hunting seasons if predictions made in June and July have proven correct. The dry summer prevailing in Louisiana will mean tough going for hunters pursuing upland game, and those after that champion buck will need to go where browse is best. Probably only waterfowl hunters will have the best chance of reaching their limits wherever they go in Louisiana's wintering grounds.

The following is a prediction of what hunters can expect this year. Please consult the Hunting Regulations Pamphlet for rules and regulations regarding hunting in Louisiana.

DEER

The deer harvest has remained good in Louisiana during the last few years. All the data is not yet available for 1994-95, but the trend is expected to continue. Opportunities, however, will vary across the state.

The best habitat for deer is bottomland hardwood, prevalent in Area 1 and parts of areas 4, 6 and 8. "We're looking for another good harvest in these areas," said Department of Wildlife and Fisheries Deer Study Leader Dave Moreland.

The most important factor will be the mast (acorn) crop. "Between Hurricane Andrew in 1992 and a late freeze in 1993, the acorn crop was hurt," said Moreland. "1993 was a poor mast year, but the white oak acorn crop was good in 1994. This year, we're expecting a good red oak crop too."

Moreland indicated that buck weights are down in general, especially in older bucks, perhaps because of the lack of a good red oak acorn crop since 1992. "With a good mast crop, weights will be up," he said.

Some parishes in areas 2 and 3 have shown slight declines in overall harvest in recent seasons. These are regions of pine timber forests which, as they mature, close out the understory, reducing the quality of deer habitat. Sportsmen interested in increasing their chances should remember

Photo by Gary Kramer

Photo by Jerry Hennen

Millions of waterfowl, such as the Blue-winged Teal at top, are expected to make their way through Louisiana this fall. The upland game forecast, including squirrel, is less promising because of extremely dry weather during the beginning of the summer.

that management, including cutting, burning and thinning, is key to producing a successful herd.

"There continues to be increased interest in the coastal parishes from hunters who were once exclusively or mainly waterfowl hunters," said Moreland. "They're starting to take advantage of the deer out there."

Area 6, which includes the Atchafalaya Basin, is doing well following the hurricane. "Hurricane Andrew caused no significant detrimental effects to the deer population in the Basin," said Moreland. "In fact, it helped habitat by creating undercover and providing food. We're seeing some nice deer come out of the Basin."

Another good season is anticipated in Area 8, the Florida parishes.

Area 7, which includes portions of Iberia and St. Mary parishes, will again have early still hunting to allow hunters an opportunity to hunt during the rut.

UPLAND GAME

Upland game species will be most influenced by dry weather earlier this summer. For most, the effects will be detrimental. Only doves won't be adversely impacted. "This is the one species that dry weather helps," said Mike Olinde, LDWF Upland Game program manager. "Doves build such fragile nests that inclement weather is harmful to their reproductive success." In general, Olinde reports a national increase in dove populations, but not a significant one.

"The quail outlook is hard to predict because peak production occurs in late July and August," he said. "We should expect more quail this year than last if we don't experience significant summer drought. The mild winter and spring rain created good conditions for quail production despite the dry June."

Woodcock populations were down last year as had been predicted, but this year's breeding index is up and conditions have been fairly good for this species. "We're hoping for above average production," said Olinde.

Rainfall will be the biggest factor as far as rabbits are concerned. Last year's population was high and rain earlier this year should help, but the dry May and June may lead to low numbers for 1995's season.

Squirrel populations are below average in general in Louisiana, except where high overcup oak or beech mast production has occurred. In these areas, there may actually be an increase, but Olinde predicts, "The season will be average at best. In good years, we could expect squirrels to produce two litters, but I expect in many areas only one litter will be produced."

In general, extreme drought like that which dominated the weather picture at the beginning of the summer isn't good for upland game species. Overly wet conditions aren't good either. "If the summer rains begin soon, then the seasons can be good," concluded Olinde.

WATERFOWL

This is the second year of exceptionally good conditions in the northern breeding areas for waterfowl. Lots of rainfall, snowfall and subsequent runoff in the heart of the breeding area (North Dakota, South Dakota, Minnesota and Montana, and the provinces of Saskatchewan, Manitoba and Alberta) should mean another great winter for Louisiana's duck hunters — maybe even a better one. A lot of waterfowl are available to breed and production is predicted to be even higher than last year.

Other factors will contribute to the overall healthy waterfowl population. "Due to several consecutive years of moist soil conditions, farmers were prevented from plowing in places in the breeding areas," said Robert Helm, LDWF waterfowl study leader. "This has allowed growth of grasses and other lush vegetation and generally improved the uplands where ducks nest. It's an ideal set of circumstances."

Helm also cited the U.S. Department of Agriculture's Conservation Reserve Program (CRP) as adding to large duck production. "This program pays farmers to set aside marginal farmland in these important regions for waterfowl habitat," he said. "More than 3 million acres of good nesting conditions have been provided by CRP."

1995-96 HUNTING SEASON DATES AND BAG LIMITS.

Quail: Nov. 23-Feb. 29. Daily bag limit: 10. Possession limit: 20.

Rabbit: Oct. 7-Feb. 29. Daily bag limit: 8. Possession limit: 16.

Squirrel: Oct. 7-Jan. 28. Daily bag limit: 8. Possession limit: 16.

Dove: Sept. 2-10, Oct. 21-Nov. 20 and Dec. 16-Jan. 14. Daily bag limit: 12. Possession limit: 24.

Snipe: Nov. 4-Feb. 18. Daily bag limit: 8. Possession limit: 16.

Woodcock: Nov. 28-Jan. 31. Daily bag limit: 5. Possession limit: 10.

King and Clapper Rails: Sept. 16-24, Nov. 11-Jan. 10. Daily bag limit: 15 in the aggregate. Possession limit: 30.

Sora and Virginia Rails: Sept. 16-24, Nov. 11-Jan. 10. Daily bag and possession limits: 25 in the aggregate.

Gallinules: Sept. 16-24, Nov. 11-Jan. 10. Daily bag limit: 15. Possession limit: 30

Teal (Cinnamon, Blue-winged, and Green-winged only): Sept. 16-24. Daily bag limit: 4. Possession limit: 8.

1995-96 DEER SEASONS

For complete descriptions of Deer Areas, consult the Hunting Regulations Pamphlet.

Daily bag limit: 1 antlered and 1 antlerless (when legal), 6 per season by all methods of take. Either-sex deer hunting dates are contained in the hunting regulations.

Archery: Oct. 1-Jan. 31 (Area 1); Oct. 1-Jan 21 (Areas 2-8).

Area 1: [northeast Louisiana]
Nov. 18-Dec. 1 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 9-Jan. 4 (with or without dogs)
Jan. 5-15 (still hunt only)

Area 2: [north and central Louisiana, and parts of Beauregard and Calcasieu parishes]
Oct. 28-Dec. 1 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 9-Jan. 4 (with or without dogs)

Area 3: [southwest Louisiana and west central Louisiana]
Oct. 21-Dec. 1 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 16-Jan. 4 (still hunt only)

Area 4: [East Carroll and portions of Morehouse, Ouachita, and Richland parishes]
Nov. 18-Dec. 1 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 9-Jan. 7 (still hunt only)

Area 5: [West Carroll Parish]
Nov. 18-26 (still hunt only)
Dec. 2-Dec. 8 (still hunt, muzzleloader only, bucks only)

Area 6: [southeast Louisiana, including the Atchafalaya Basin.]
Nov. 18-Dec. 1 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 9-Jan. 21 (with or without dogs)

Area 7: [coastal portions of Iberia and St. Mary parishes]
Oct. 21-Nov. 5 (still hunt only)
Nov. 18-26 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 16-Jan. 21 (with or without dogs)

Area 8: [the Florida parishes and part of Avoyelles Parish. East Feliciana Parish, part of which previously considered Area 2, is now completely in Area 8.]
Nov. 18-Dec. 1 (still hunt only)
Dec. 2-8 (still hunt, muzzleloader only)
Dec. 9-Jan. 4 (with or without dogs)
Jan. 5-21 (still hunt only)

LOUISIANA BIG GAME RECOGNITION PROGRAM 1992-1994

The Louisiana Big Game Recognition Program recognizes trophy deer harvested statewide. Trophy status is based upon a point system and is available for those deer taken with bow, muzzleloader and modern firearm. The list below indicates those parishes where the largest bucks were taken during 1992-1994. Numbers indicate the number of trophy bucks harvested in each parish. Note that parishes bordering major rivers produced most of the trophy deer.

Avoyelles	2
Bienville	1
Caddo	1
Cameron	1
Concordia	4
De Soto	1
East Carroll	7
East Feliciana	6
Evangeline	2
Grant	2
La Salle	2
Madison	3
Morehouse	1
Natchitoches	2
Pointe Coupee	1
Rapides	3
Sabine	1
St. Helena	3
St. Landry	2
St. Mary	5
St. Tammany	2
Tangipahoa	1
Tensas	8
West Feliciana	10

Deer seasons should be generally good across the state if the expectations of good crops of both white and red oak acorns prove true.

Photo by Jason Saucier Jr.

Catch & Release It Works!

LDWF file photo

Due to generations of learning, believing and teaching "if you catch it, keep it," many Louisiana anglers are reluctant to release any desirable or "keeper" fish that happen to be caught. The reason most often heard is, "I know this fish won't live anyway, so why throw it back?" Until now, fishermen have had nothing more than their own, or someone else's, personal opinion to support that statement.

BY GLEN THOMAS

At one time, recreational fishermen in Louisiana had few size limits and most fish considered good to eat were thrown into an ice chest. Now, increasing numbers of fish are being returned to the water. Higher numbers of releases occur due to regulations to protect fisheries (such as size and creel limits) and to an increasing ethic of voluntary catch-and-release fishing.

Additionally, most recreational anglers now appreciate that unwanted fish which are caught incidentally in the pursuit of more favored species deserve treatment that will give them the best chance of survival to provide future fishing opportunities. Some anglers might want to make an exception for that 34th hardhead catfish of the day, but even hardheads have a purpose in the ecosystem.

Hook-induced post-release mortality has become an increasingly important aspect of fisheries management. The survival rate of released fish has always been a point of often heated argument, both among fishermen and among resource managers. Accurate assessment of release mortality has also become important information for use in population modelling and the setting of regulations. No controlled studies on the survival of hooked and released speckled trout and red drum (redfish) have been previously conducted in Louisiana. Some studies were done in Texas with mixed results. Survival of hook-caught specs held in cages ranged from zero to 100 percent. A recent study of hook-caught red drum in Georgia was conducted under different conditions than those here. Survival there was about 80 percent.

In order to provide reliable answers about survival of released fish in Louisiana, an extensive catch-and-release mortality study has been under way at the Department of Wildlife and Fisheries Lyle St. Amant Marine Laboratory on Grand Terre Island since the spring of 1993. The study duplicated conditions common to typical sportfishing capture, handling and release of specs and reds, except that fish were kept in tanks after landing to assess survival rates. Fish were taken by four common fishing methods: single hook artificial (i.e. sparkle beetle), treble hook artificial (i.e. spoon), single hook with live bait and treble hook with live bait. Mortality rates were then assessed for each method.

Photo by Andy Crawford

All fish caught in the study were handled similarly, regardless of the hook/bait combination used. Our anglers ranged in experience from experts to novices and no extra or special care was taken in the handling of captured fish. After being brought to the boat, fish were grasped barehanded or with a wet cloth, unhooked and then placed in flow-through tanks aboard the boat for transportation to the marine lab. At the lab, the fish were held in 500-gallon tanks through which water from Barataria Bay was constantly pumped and temperature, salinity and dissolved oxygen were monitored. All fish were held for three days, with some being held for seven days to check for delayed mortality. Each fish was measured when it was released or when it died.

About 1,500 speckled trout and 450 redfish were caught and studied in the experiment. Redfish survival after hooking was 97 percent overall, with little difference in survival rates between groups taken by the different fishing methods. Single hook artificials resulted in 99 percent survival, treble hook artificials 97 percent, live bait on single hooks 96 percent and live bait on trebles 94 percent.

Speckled trout proved to be considerably more hardy than many people believed, but were not as tough as redfish. Overall survival for trout was 83 percent, with highly significant differences between the groups taken by different methods: treble hook

A National Marine Fisheries Service study showed that even fish caught at fairly great depths, such as red snapper, have exhibited good survival rates when inflated air bladders were punctured with a hypodermic needle, allowing released fish to swim downward quickly.

Photo by Glen Thomas

Proper handling by LDWF marine fisheries biologists greatly increased survival rates of released fish. Fish caught for the study were kept in large tanks, above, and monitored for signs of distress. Use of small-mesh nets and careful dehooking, bottom right, were found to be vital in ensuring survival of released speckled trout and red drum.

artificial, 97 percent; single hook artificial, 91 percent; treble hook bait, 83 percent; and single hook bait, 74 percent. Part of the reason for the differing survival rates is the way each type of bait is fished. Artificials were always fished actively with a tight line. Lures are also often struck and released if the fish isn't hooked. Thus, almost all lure-caught fish are hooked in the mouth area. Bait is more likely to be swallowed, resulting in deep hooking, especially in windy conditions when it is difficult to detect strikes.

Dividing the redfish in the study into groups of legal sized (16 inches) and sublegal fish showed no real difference in survival rate. Ninety-six percent of legal reds lived, as did 98 percent of those under 16 inches. There was a significant difference, however, in survival of sublegal (shorter than 12 inches) and legal trout. An important revelation was that undersized specs were more likely to survive (87 percent) than were legal sized trout (81 percent). Reduced survival in larger trout is probably due to several factors. They're more likely to swallow the hook, they're more likely to fight to exhaustion and they're more likely to be spawning female fish. Spawning is metabolically costly to females, and very ripe fish stand to incur ovarian damage during rough handling.

In general, we found that fish that are hooked deeply may die and that mouth hooked fish almost always live. Additionally, we learned that any fish that die generally succumb soon after hooking. When the water was lowered in the holding tanks for observation after 24 hours, dark marks from handling during landing are apparent on the fish, as are bits of torn tissue at the hook site and shedding layers of bacteria fighting mucous. By day three, marks have faded, shredded tissue is largely gone and the fish have regained a clean, silvery coloration.

Netting and measuring fish after their stay in the holding tanks is a wet chore. There can be no doubt that they are very vigorous and healthy!

In addition to the valuable catch and release mortality statistics, the study revealed some techniques available to recreational fishermen which may increase a released fish's chances for survival. Extensive studies with other inshore species have demonstrated some hooking/handling methods which have become accepted as optimum for almost any fish. If handled properly, almost any fish caught by an angler has a very good chance to recover, live and reproduce to provide future fishing recreation for Louisiana sportsmen. Anglers who make an effort to employ these techniques can take pride in knowing that they've done all they can to maximize the survival of their releases.

Many landing nets are made with hard, knotted webbing that causes abrasion to fish's scales, skin and eyes. The best nets are made with softer, knotless webbing, coated to prevent spine entanglement. Small mesh size (¼ inch) provides increased support without the "pressure points" caused by larger mesh.

When handling fish, keep contact with the gills and the eyes to a minimum. Be very careful not to cause additional damage to the gills when removing a hook. Fish seldom survive if the major blood vessels of a gill arch are cut. We've also found that a firm grip around the fish's midsection is less harmful overall than a very light grip, which often results in dropped fish. Always keep some sort of dehooking device handy. Struggling to remove a deeply embedded hook can cause more damage than the hook

Photo by Glen Thomas

itself. One of the best options is the type of fishing pliers commonly carried on fishermen's belts. A landed fish can conveniently be grasped in one hand while the pliers are used with the other hand, resulting in a quick and efficient hook removal and release. Other dehooking devices are available and can produce efficient releases with minimal handling.

It is usually better to leave the hook in a very deeply hooked fish that is to be released. Just cut the line as close to the fish's mouth as possible. Plated hooks will degrade somewhat faster than stainless steel hooks, but we've caught healthy looking, actively feeding fish with old hooks of either type still in them. If an angler is planning to keep some fish, keeping the more deeply hooked or bleeding fish (if they're of legal size) and releasing the lightly hooked ones makes the most sense.

One approach that helps prevent unnecessary loss of released fish is to move to another area when all the fish being caught are sublegal in size. Schools of small reds or specks often contain few "keepers," so fishermen (and the fish) are best served by looking in another area.

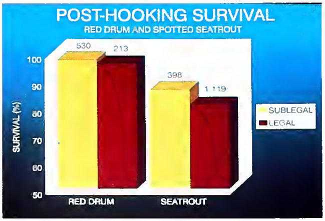
When fishing with bait, keep a tight line, and pay constant attention to the line. Leaving a line unattended often results in swallowed baits and deeply hooked fish. Set the hook as soon as possible after feeling the fish pick up the bait. Try to find the technique which will most often result in solidly mouth-hooked fish on any given day. Prompt hook setting may result in an occasional missed fish, but it will pay off in the long run as more fish are returned to the water in better shape. As a bonus, both the fish you keep and those you release will be easier to get off the hook.

Small hooks are more readily swallowed than larger sizes, and treble hooks aren't necessarily more damaging than singles if they are of a size that isn't readily swallowed (no. 2 and larger). If, for instance, on a given day an angler finds that fish are frequently swallowing the bait when a 1/0 single hook is used, going to a 2/0 or 3/0 can solve much of the problem. The LDWF study, like others, found that deep hook locations common with smaller hook sizes are much more damaging than are the more superficial mouth wounds likely with larger hooks.

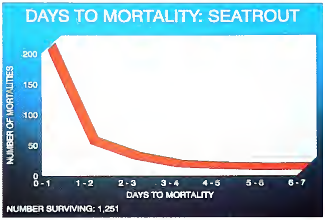
Using barbless hooks (or just mashing down the barb of regular hooks) may produce a little less damage to released fish and certainly cuts down handling time. Studies have also found that when hooks are left in fish, barbless hooks are much more likely to be quickly shed.

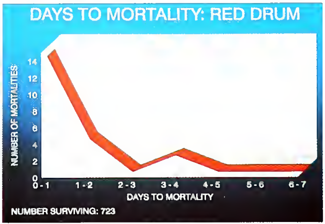
Light tackle is usually considered to be the most "sporting" gear, but it is actually very hard on strong fish which require considerable time to land. Extreme exhaustion is the result, with greatly reduced chances for survival after release. Matching heavier gear to those larger fish intended for release will give them the best odds.

Enforcement of minimum size restrictions on many species requires that small fish be released, even if they have been deeply hooked. This seems wasteful to many anglers, especially if the fish is bleeding or weak. However, if the harvest of small fish were allowed, many fish would be kept that otherwise would have lived to reproduce. It is better overall to lose a few released fish than to allow the harvest of many smaller fish and lose the reproductive potential of these rapid growth stages. Even fish that appear to be in poor shape have some chance of survival, and a surprisingly large number have a very good chance of survival. Treating them with care during dehooking and release simply increases that chance and helps to ensure fish for tomorrow. ■



LDWF graphics





LDWF graphic

The LDWF mortality study found very little difference between survival rates of small fish and survival rates of larger fish, top. The middle and bottom graphs show dramatic increases in survival rates for speckled trout and red drum within a day after release.

Stair Steps to the North:

CREATING CRITICAL WETLANDS FOR MIGRATING WATERFOWL

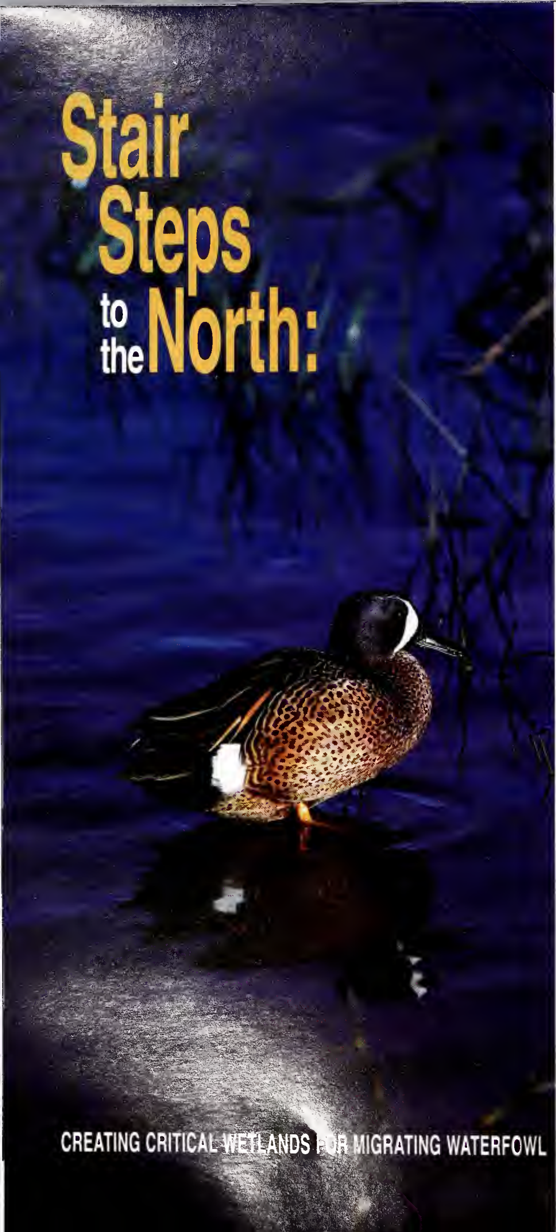


Photo By Gary Kramer

BY ANDY CRAWFORD

Intensive waterfowl management is nothing new to Louisiana's wildlife management areas. Biologists have long recognized the importance of this state to migrating waterfowl and have sought to enhance wetlands wherever possible to facilitate the annual movement of ducks, geese and other water-dependent bird species.

These efforts, however extensive, have traditionally been limited almost exclusively to the relatively small number of acres under government ownership. Some efforts have been made in the past to involve private landowners, but most individuals were unwilling to participate because many of the programs restricted landowner activities.As a result, waterfowl habitat was created in small blocks scattered across the state. A private lands program begun in 1992 in north Louisiana, however, is changing that.

The Louisiana Waterfowl Program (LWP), sponsored by the Department of Wildlife and Fisheries (LDWF), Ducks Unlimited (DU) and the U.S. Natural Resources Conservation Service (NRCS), formerly the U.S. Soil Conservation Service, had drawn in 66 landowners in 19 parishes by the end of 1994 and created more than 12,400 acres of habitat for waterfowl migrating south in the winter and north in the spring. An additional 13 landowners had enrolled 2,040 acres as of July 1, 1995, and 28 others are expected to enter 2,847 acres of land by the end of 1995.

"Before this program, waterfowl had to rely mostly on natural backwater flooding for habitat," said Jimmy Emfinger, LDWF's coordinator for the North American Waterfowl Management Plan. "If we didn't get backwater flooding, we didn't get sufficient late winter and spring habitat. Now we have reliable wetlands for these birds to use on their way back north. This provides a continuous stair-step of habitat waterfowl need along their migration routes."

Continuity of habitat was something that simply could not be provided by enhancement to state and federally owned lands. "There's only so much money the state and federal governments have to spend on conservation, so this acts as a catalyst to get the private sector involved and allows landowners to restore and enhance habitat in areas that traditionally were out of our reach," said Robbie Howard, a private lands project biologist for Ducks Unlimited.

The reason for landowner participation is simple. "It doesn't infringe upon our rights and what we want to do with the land," said Mike Cater of Tensas Delta Land Company. This private company has enrolled about 4,843 acres of land in the program since enrolling in 1992.

Portions of enrolled land are flooded each winter and the water level maintained at least until March 1. The program is thus far confined to the Red River Delta and the Mississippi Delta north of Marksville. There are plans, however, to eventually expand into the rice country of southwest Louisiana.

The LWP is part of a continental effort to increase waterfowl populations. The North American Waterfowl Management Plan began in 1986 in response to falling waterfowl populations. The plan's goal is to return waterfowl numbers to the 100 million mark through improvement of habitat needed for nesting and migrations.

The efforts of this 15-year program already have shown success. An estimated 71 million ducks participated in the 1994 winter migration, up from about 60 million in 1993. This year's fall flight forecast also shows a significant increase, with 80 million ducks expected to fly south from surveyed areas.

Estimates of 1995 duck breeding populations indicate there were approximately 34 million breeding ducks in the nesting grounds of Canada and the midwest United States this spring, up from 29 million breeders in 1994. This is more than half of the NAWMP goal of 62 million breeders by 2001.

Of the 10 most common duck species, including Mallards, Pintails, Gadwall, Wigeons, Green-winged and Blue-winged teal, Shovelers, Redheads, Canvasbacks and Scaups, only Pintail and Scaup populations continue to show some long-term decline. The plan also appears to have helped stabilize Black Duck populations after a 30-year decline in North America.

Much of this population growth has been accomplished through protection and restoration of critical wetlands, some of which had been drained and used for agriculture. By the end of 1994, more than $500 million had been invested in the purchase, lease, restoration or enhancement of about 2 million acres of habitat throughout the

Photos courtesy of Ducks Unlimited

Donated pipe is used to construct water control structures, top, so participating landowners can maintain dependable sources of water for migrating waterfowl. The structures are opened, bottom, after March 1, allowing water to drain and the land to be used for agricultural purposes.

United States and Canada. Total cost of the program is expected to be about $1.5 billion.

Louisiana has been an integral part of national waterfowl conservation efforts for more than 50 years. Because of its ongoing efforts and financial contributions totalling more than $5.5 million, the Department received Ducks Unlimited's 1995 Conservation Achievement Award. LDWF contributions, both biological and monetary, have supported 115 Ducks Unlimited projects in critical northern breeding grounds and helped restore 29,000 acres of wetlands in Louisiana since 1986.

Currently, there are 31 wetlands development projects in Louisiana, in addition to the Louisiana Waterfowl Program, that have created thousands of acres of habitat for birds migrating through this state. Examples of these projects include a 1,500-acre greentree reservoir on Boeuf WMA, re-establishment of the wetlands hydrology on 700 acres of agricultural land within Red River WMA (the Yakey tract), placement of water control structures to develop wetland habitat on Three Rivers WMA, the development of a wetland impoundment on Bayou Pierre WMA and creation of delta marshes at the mouth of the Mississippi River through diversion of silt-laden river water.

These projects are funded through National Fish and Wildlife Foundation grants, Ducks Unlimited's Matching Aid to Restore State Habitat (MARSH) funds, North American Wetlands Conservation Act grants and the sale of state Duck Stamps. Some projects also are partially funded through corporate donations.

"Most of these projects could not have been completed without these funding sources," Emfinger said. "We use every funding source that we can tap into."

Thousands of ducks swarming enrolled fields serve as evidence of the Louisiana Waterfowl Program's phenomenal success.

Photo courtesy of Ducks Unlimited

The Louisiana Wetlands Program was conceived to involve private landowners in sending migrating waterfowl back to northern breeding grounds in top physical condition by providing continuous blocks of habitat in which migrating waterfowl can rest and feed on their long journey.

"There's been research showing that the physical condition of birds returning to northern breeding grounds has a direct bearing on ducks' breeding potential," Emfinger said. "If you send a bird back in good shape, the bird gets up there with enough energy reserves to begin breeding and carry through to fledge their young.

The "stair-step" approach to habitat enhancement is amplified by similar projects being undertaken in neighboring states. Louisiana's enrolled acreage connects to areas in southern Arkansas and northwestern Mississippi. These enhanced tracts likewise extend in an almost unbroken chain of wetlands through Tennessee, Missouri and Illinois to provide jumping-off points for birds flying to breeding grounds in northern states such as North and South Dakota and into Canada.

Participating landowners are provided control structures to maintain water levels on their fields and the expertise to properly install the mechanisms. Ducks Unlimited provides the structures, made from donated oil and gas pipe and the NRCS provides engineering services to ensure proper installation. LDWF provides annual cash contributions of $35,000 and waterfowl management assistance to participants on an on-going basis. The landowner absorbs the cost of building levees and installation of control structures. Participants must agree to maintain the levees and structures for a minimum of 10 years.

The cost to landowners varies from project to project, but many of the fields are used to produce rice and already have some type of levee system which lowers the cost of converting these fields for the program. Some landowners invest as little as $8 per acre to make their farmland suitable for migratory bird use. "You can really get a lot of water from a minimal amount of out-of-pocket expense," said landowner Ronny Graham. Graham and his partners have enrolled about 350 acres in the program and plan to add 250 to 300 acres this fall.

Whatever the investment, however, the potential for lower crop production costs and enhanced wildlife usage more than compensate the conservationist farmer.

"The landowner curtails pollution due to reduced fertilization, the amount of herbicides and tillage needed is reduced because the standing water controls noxious weeds, and there is less run-off of topsoil because sediments in drainage water settle before being dumped into the rivers," Emfinger explained. "It really is a win-win situation."

Louie White, a Morehouse Parish farmer who recently enrolled more than 500 acres, said the potential of reduced crop production costs is why he joined the program.

"Water drains off my land very fast and I was losing a lot of topsoil," White explained. "We're going to hold water on the land now and that will help stop a lot of that run-off." This landowner has paid all associated costs of the program, including buying pipe for the structures.

Cater said standing water also helps "mellow" the soil. "A lot of times dirt sticks together in big clumps and doesn't provide an ideal seed bed. When water is drained from these fields after standing all winter, the dirt is looser and easier to work," he explained. "It provides an ideal seed bed."

Many landowners also make double use of the levee systems. "If I'm going to build a levee a mile long," Cater said, "I'm going to make a road on top of it. This further enhances our farm operations."

The effectiveness of the program in terms of waterfowl is illustrated by a look at Tensas Delta Land Management Company's enrolled acreage.

"We always had birds on our land, but most were dependent on winter rainfall and flooding," Cater said. "That was nothing compared to what we have now. It's just amazing."

The dramatic increase in waterfowl use has prompted LDWF biologists to add the area to their annual waterfowl survey. "It attracts a lot of birds in a relatively small area, so we shifted our survey," Emfinger said.

Such increased usage probably does not reflect more birds coming into the state as much as a redistribution of waterfowl. "It's drawn birds to these dependable sources of food and habitat," he said. "Now, instead of having to fly farther north to find water during dry years the birds can stop at these managed wetlands to rest and prepare for the next leg of their migration."

Regardless, Mike Costello has enrolled 572 acres since 1994 because of increased numbers of birds utilizing program lands. "This is a natural flyway and I thought there was a need to bring more ducks in," he said. "I have two boys who love to hunt and I've put a camp out there so we can enjoy the waterfowl."

The resulting increase in hunting opportunities also can provide monetary benefits for participants. Tensas Delta Land Management Company operates a commercial duck hunting business on company lands enrolled in the program. "It's been very successful," Cater said.

The only stipulation regarding hunting by landowners is that hunts can only take place from legal shooting hours until noon.

The total benefits of the program, however, are such that enrolled lands act as attractions to neighboring landowners. "It works for one guy, so neighbors want to get in on a good thing," Emfinger said. "You begin to have clusters of habitat that begin to grow."

Even though many landowners first enroll because of potential savings in crop production, the conservation ethic quickly takes over. "They start taking a certain amount of pride and enjoyment in seeing wildlife on their land," Howard explained. "They realize they can have a truly positive impact upon the environment." ■

Interested landowners in participating parishes can get more information about enrolling in the Louisiana Waterfowl Program by contacting Robbie Howard at 318/387-8683, Jimmy Emfinger at 504/765-2354 or any of the U.S. Natural Resources Conservation Service (formerly the U.S. Soil Conservation Service) offices in Avoyelles, Bossier, Caldwell, Caddo, Catahoula, Concordia, East Carroll, Franklin, Grant, LaSalle, Madison, Morehouse, Natchitoches, Ouachita, Rapides, Red River, Richland, Tensas and West Carroll parishes.

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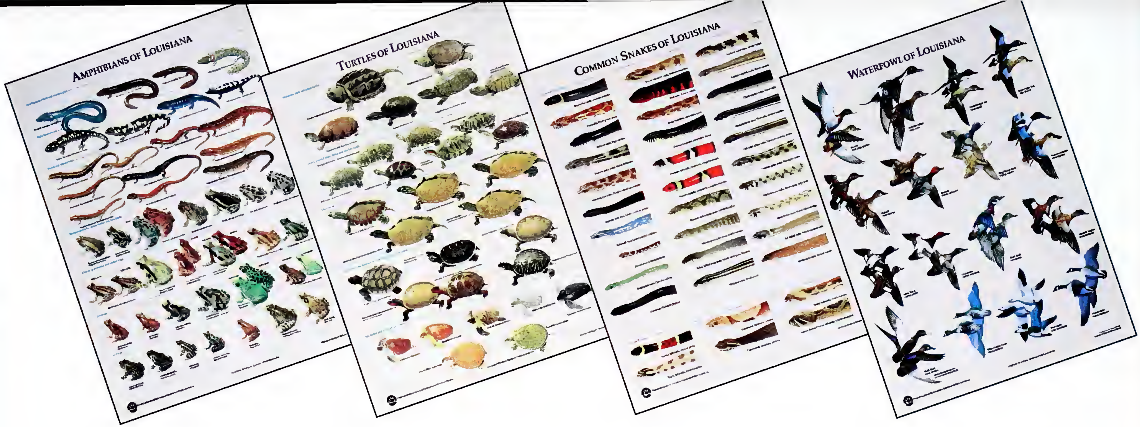

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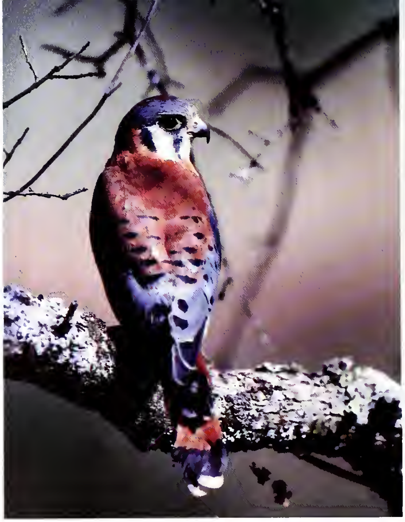


Photos by Gary Kramer

LOUISIANA HAWKS: A RAPTOR REVIEW

BY BILL VERMILLION

Throughout the year Louisiana hosts a diverse group of hawks. In simple terms, hawks are birds of prey that hunt during daylight hours. With the exception of vultures, who subsist primarily on dead animals, hawks hunt live animal prey using powerful claws, or talons, and hooked bills as weapons.

Hawks have long been persecuted by humans as destroyers of game species and poultry, but the overwhelming majority of prey taken by hawks are not game species or domestic fowl. Red-tailed Hawks, for example, most often eat small rodents. Birds of prey like Red-tailed Hawks are important in regulating the population size of their prey, preventing overpopulation and subsequent diseases or starvation.

Hawks found in our state include the Osprey and Northern Harrier, kites, accipiters, buteos, eagles and falcons. The **Osprey** is unique among hawks for its exclusive fish diet, made possible by its fish-gripping knobby feet. The bird is chocolate brown above and white below, with a white head and dark brown eye stripe. It hovers on bowed wings over inland and coastal bodies of water, plunging feet first to capture fish. In Louisiana, the Osprey is most common in fall and spring migrations and during winter. Probably less than a dozen pairs actually nest in the state. This small number of breeders is rather puzzling considering the amount of aquatic habitat available.

Many types of harriers are found in Eurasia, but North America is home to only one, the **Northern Harrier** or marsh hawk. In our state, the Northern Harrier is seen from late fall to early spring gliding at very low altitudes over marsh and field with wings tilted upward in a V-shape. The males' backs are silver and gray, the females' brownish. Both have a wide, white rump patch. Harriers' faces resemble the flattened facial disks of owls.

Kites are named for their soaring and hovering flight style. Three species are known from Louisiana. The **Mississippi Kite** is found in Louisiana from spring to early fall. Roughly crow-sized, with long tails and long, pointed wings, gray bodies and light colored heads, **Mississippi Kites** glide above the tops of large hardwood trees, diving to snatch dragonflies, cicadas and other large insects from the air. They may nest in suitable habitat in cities and can be seen from Louisiana Department of Wildlife and Fisheries headquarters in Baton Rouge over the trees lining nearby streams.

The **American Swallow-tailed Kite** rarely breeds in Louisiana. Its bold black and white pattern and deeply cleft tail are distinctive. It inhabits areas of extensive mature woodlands in the Pearl, Atchafalaya and Sabine river basins.

The **White-tailed Kite** (formerly called Black-shouldered Kite) is an increasingly observed winter visitor, hovering over marsh and agricultural land in southwestern Louisiana. This pearly white kite with black shoulder markings has also been found in pine savannahs in St. Tammany Parish.

Accipiters are sometimes called "blue darters." These hawks specialize in taking woodland birds as prey. Their short rounded wings and long tails enable them to maneuver rapidly through trees. Two species of accipiters are frequently encountered in Louisiana, the **Sharp-shinned Hawk** and the **Cooper's Hawk**. These raptors are most often observed here in fall, winter and spring. They are very similar in appearance, both approximately the size of a crow, with blue-gray backs and breasts streaked with reddish-brown. In general, the Sharp-shinned Hawk is more numerous than the Cooper's Hawk. Sharp-shinned Hawks average slightly smaller in size than crows and have square tail tips; Cooper's are slightly larger than crows and have rounded tail tips. A few Cooper's Hawks breed in mature pine or pine-hardwood forests in north and central Louisiana. Accipiters sometimes prey upon songbirds around bird feeders, a habit that distresses many backyard bird watchers. Although it may be disturbing to see "your" cardinals or sparrows captured, the hawk is only doing what it must to survive. By concentrating songbirds around your feeder, you are providing the hawk with a food source as well. If you stop feeding them for a while, the hawk may move on. You can try to scare the hawk away with loud noises or water sprays, but it is illegal to shoot or harm hawks in any way.

Buteos have broad, rounded wings and short to medium tails. This group includes the **Red-tailed Hawk,** the most familiar raptor to Louisianians. Numerous in our state in winter, Red-tailed Hawks are found across the state in a variety of habitats, from marsh to agricultural land to suburbs. Small numbers breed in mature upland forests and wood lots in the state. The typical Red-tail has a rusty red upper tail surface, brownish back and wings mottled with white, a white chest and brownish belly band. There are also light and dark color phases. Red-tailed Hawks are often seen perched along roads. They feed predominantly upon rats and mice with an occasional reptile, insect or fish.

Another buteo, the **Red-shouldered Hawk**, is also very common in the state. Its call, described by Roger Tory Peterson as a "two-syllabled *kee-yer,*" is a familiar sound in bottomland forests and swamps. It is slightly smaller than the Red-tailed Hawk, with a brown back, rusty shoulders, brown and white-banded tail and brownish-red underparts. As might be expected from their habitat, Red-shouldered Hawks eat frogs, water snakes and other wetland creatures in addition to small mammals.

Broad-winged Hawks resemble small Red-tailed Hawks but have brown and white banded tails. The call is a high-pitched whistle. They nest in our state in areas of extensive, mature upland forests. Many Broad-winged Hawks migrate through Louisiana in spring and fall.

Other buteos are rare visitors to Louisiana. **Swainson's Hawks** are occasionally seen in southwestern Louisiana in spring or fall. **Rough-legged Hawks** and **Ferruginous Hawks** have been found during winter; both species have been recorded on the Tensas Christmas Bird Count in Madison Parish. The state status of **Harris' Hawk** is unclear because this bird is popular for falconry, sport hunting using trained hawks to catch game animals. Some individuals seen may be escaped or released falconry birds.

Though uncommon, **Bald Eagles** nest in cypress swamps bordering fresh marsh or along large lakes in southeastern Louisiana, and in other scattered locations across the state. Another non-breeding population of Bald Eagles spends the winter near large lakes and reservoirs in the north and central parts of the state, such as Caddo Lake in Caddo Parish and Catahoula Lake in LaSalle Parish, departing at winter's end for breeding territories elsewhere in the United States and Canada.

Golden Eagles are infrequently observed in Louisiana during winter months, often in association with flocks of geese, or

The Red-tailed Hawk, at left on facing page, are numerous during the winter and can be found in marshes, agricultural land and suburbs. The American Kestrel, at right on facing page, is a robin-sized raptor often seen during the winter on roadside power lines.

Photo by Gary Kramer

The Cooper's Hawk, one of two species of accipiters found in Louisiana, specializes in taking woodland birds as prey.

scavenging on white-tailed deer carcasses. Immature Golden and Bald Eagles are very similar in appearance, but can be differentiated when seen in flight. The immature Golden Eagle has distinct white patches on the underside of its wings and a white tail tipped with a dark band. Immature Bald Eagles seen from below show diffuse, poorly defined white markings in the wings and tail.

With long, pointed wings and fast, direct flight, falcons epitomize speed and grace. Of course, there is always an exception to a rule. The **Crested Caracara**, though considered a falcon, does not have long pointed wings, nor does it fly overly fast. It is a good runner, however, and is often seen on the ground, feeding on carrion. When a Crested Caracara arrives on the scene of a road kill, vultures step aside and let it eat its fill. It is extremely rare in Louisiana. A few pairs may nest in the Gum Cove area of Cameron Parish. The Crested Caracara is largely brownish-black with a white throat and a patch of red skin behind the bill. The slight crest gives it a big-headed look.

Our state hosts other, more typical falcons. The smallest is the **American Kestrel** or sparrow hawk. This robin-sized raptor has a rufous back, a black ear spot, a black vertical line on the head and another black line below the eye. It nests in Louisiana in abandoned woodpecker holes in open upland forests, but is more likely to be encountered sitting on a roadside power line in winter, when the state's small breeding population is augmented by an influx of kestrels from the north.

The **Merlin**, or pigeon hawk, is about 12 inches long from bill to tail. This bird migrates through the state in fall and spring; a few individuals spend winter here. Males are gray-backed; females brown-backed. Both sexes have a thin vertical black bar below each eye and a barred tail. In April, look for Merlins in the large live oaks around Sabine National Wildlife Refuge Headquarters on Louisiana Highway 27.

The crow-sized **Peregrine Falcon**, sometimes called the duck hawk, is the largest of the typical falcons found in the state. Known for its high speed dives in pursuit of prey, the Peregrine plummets at speeds that may exceed 150 miles per hour. Plumage is quite similar to the male Merlin's, but the Peregrine has a bold black "mask." Present in our state from late fall through early spring, this bird is most often located in coastal Louisiana, perched on a high vantage point as it surveys for a teal or shorebird dinner.

Despite the increased awareness of the role hawks play in nature, many are shot every year by thoughtless slobs. This is not only stupid and reprehensible but illegal. Birds of prey are protected by federal and state laws. Convictions for killing protected birds, or for possessing them or their body parts, can result in prison time and costly fines. If you have information regarding illegal take of protected birds, including seabirds, waterfowl, wading birds, birds of prey or songbirds, call the Louisiana Department of Wildlife and Fisheries Enforcement Hotline, **1-800-442-2511**. If you find an injured hawk, contact Bill Vermillion, nongame biologist at **(504) 765-2976**, or a district office of the Louisiana Department of Wildlife and Fisheries for information on wildlife rehabilitators in your area.

Hawks are symbols of nobility and power for most cultures. For me, images of hawks stand out starkly: the rocking glide of a marsh hawk over the marsh north of Holly Beach; a mockingbird frantically trying to escape a pursuing Sharp-shinned Hawk; a Golden Eagle soaring above the rice fields near Thornwell, dive-bombed by a pair of Red-tailed Hawks who seem songbird-sized in relation to the eagle; a Red-tailed Hawk in a park in the center of Lafayette, struggling to fly with a fox squirrel in its talons; the first Bald Eagle I ever witnessed, in a cypress tree at Duck Lake in the Catahoula National Wildlife Refuge. You don't need Time-Life videos.

I saw all these things with my own eyes. Anybody who has spent time in the outdoors can relate similar experiences and will testify to the grace and hunting skill of these magnificent birds. ■

1995-96 Wild Louisiana Stamp by Claude Houchin

The beauty of the Louisiana iris, I. giganticaerulea, led to its designation as the state flower. The above illustration graces the 1995 Wild Louisiana Stamp and shows the flower in its native habitat.

The Louisiana Irises

BY GARY N. ROSS, PH.D.

Most Americans would be surprised to learn that at the turn of the last century Louisiana boasted one of the grandest displays of native wildflowers to be found anywhere on the continent. Early botanical chronicles describe the lower Mississippi delta as a kaleidoscope of color due to extensive fields of irises. Visitors and collectors poured into the state each spring to experience the extraordinary spectacle.

All that has changed. Experts estimate that only 10 percent of the iris fields described during the discovery years of the 1930s remain. (Even during the "heyday" described above, there had already been an 80 percent reduction from former times.) Urbanization, draining of wetlands, salt water incursions and collecting are all cited as contributing factors.

Although what had become distinguished as "the iris capital of the universe" is no more, Louisiana irises are far from extinct. Thanks to an ever increasing popularity among savvy gardeners, coupled with the plants' almost uncanny genetic and environmental adaptiveness, Louisiana irises are now cultivated in virtually all temperate regions of the world and with greater variety than before.

Originally named by America's premier 19th century naturalist, John James Audubon, the term "Louisiana iris" (often simply "Louisianas") is now a common name for a group of lily-like, water-loving plants within the iris family. Five distinct species are recognized: *Iris hexagona*, *I. fulva*, *I. brevicaulis*, *I. giganticaerulea*, and *I. nelsonii*. All are native principally to Louisiana and other Gulf Coast regions, and share common characteristics. For example, all species require moist, acidic soils and therefore are encountered naturally most frequently in the swampy and marshy habitats abundant throughout the Mississippi delta. Plants are usually 2 to 3 feet tall, although records exist of giants between 5 and 7 feet. The foliage is long and blade-like, arising from a shallow, elongated underground storage stem called a rhizome or "potato." Since irises reproduce both by seeds and spread of rhizomes, the plants usually grow in dense clumps. In late

"The city limits of New Orleans a
and almost geographical cent

Photo by Joseph K. Mertzewiller

The popularity of irises among gardeners has kept their beauty very much a presence in Louisiana and has prompted hybridization of native species to form new varieties of these delicate beauties, such as the tetraploid hybrid *Professor Claude* seen at right.

March to mid April, mature plants send up a blooming stalk, often branched, flaunting five to 10 large (3 to 7 inches across) showy flowers that open sequentially, each lasting two to three days. Flowers are beardless. That is, they do not possess hairlike fringes as do many European irises so often marketed in plant catalogues and which, by the way, do very poorly in the southeastern United States since beardeds are intolerant of warm, moist conditions. Each flower consists of six elements organized in two alternating whorls. Petals range from open and flaring, to arching and pendant, to ruffled and doubles. In addition, each flower often is augmented with petal-like styles (part of the pistil or female reproductive organ). Floral colors range from pure white and yellow, to blue, lavender and violet, to orange, rust and red. Some varieties are even bicolored. This rainbow palette is codified in the name "iris." Derived from Greek mythology, Iris was the goddess who transported messages between the heavens and earth. She was symbolized by the rainbow and affectionately referred to as the "Goddess of the Rainbow."

Louisiana irises have a broader spectrum of color and diversity than most other types. This uniqueness results from the fact that the five species have an unusually natural propensity for crossing, or hybridizing, amongst themselves. Both pure and hybrid Louisianas are often found growing in the same geographic location. Although no one is certain as to explanation, two theories are in general circulation. First, coastal Louisiana has a particularly high incidence of bumblebees, the chief pollinators of irises. The presence of these insects maximizes seed production. Second, the region has an abundance of water: 60 inches of rainfall each year, numerous bayous, rivers, swamps and marshes. And because of the proximity to the Gulf of Mexico, occasional high tides and breezes surge inward. Since iris seeds are endowed with a water resilient coat, the seeds are able to take advantage of water for dispersal. Therefore, the delta's geography and climate facilitate the spread and propagation of new plants, including those hybrids that would occasionally occur due to cross pollination by bumblebees.

Since 1930, man has been assisting Mother Nature. Many of the most desirable natural hybrids would have been lost were it not for the efforts of early pioneers such as John K. Small who collected and then transferred plants to botanic gardens scattered across America and Europe. Between 1930 and 1950, experimentation was so intense that the period is generally referred to as "The Golden Age of American Horticulture." Literally scores of new varieties were created and propagated.

Then, in the mid-1960s, Joseph K. Mertzewiller, a retired Baton Rouge research chemist with a burning passion for the beauty of Louisiana irises, began experimenting with the hope of creating what technically is termed a tetraploid plant. Defined as a type of genetic mutant with a chromosome

e metropolitan region are the biological
f this iris development."

(DNA) constitution that is double that of normal (diploid), natural tetraploids were what had spawned the diversity in color in Old World bearded irises. No such natural hybrids were ever discovered in Louisianas, and all laboratory attempts at creating such genetic varieties had always failed. After eight years of painstaking work with colchicine, a potent plant-derived chemical, "Mr. Joe" achieved success. In 1973, two tetraploid plants were produced. Registered as *Professor Claude* and *Professor Ike*, the new varieties were an instant sensation and were used as the basis for creating additional types. In 1985, Mertzewiller was awarded the prestigious American Iris Society hybridizer's medal for his innovative work. Today, the colchicine procedure has produced more than 30 tetraploid varieties — all registered and marketed internationally. The technique promises a virtually unlimited potential for new colors and forms in the future.

The Society for Louisiana Irises was founded in 1941. An independent and international organization pushing 600 members, SLI is a cooperating society with the American Iris Society established earlier in 1920. Both groups aggressively promote Louisiana irises by providing mechanisms for professional discourse, recognition of outstanding members and achievements, research on and registration of new hybrids, worldwide distribution or plants, and public education. Because of the societies' comprehensive programs, the future of Louisiana irises seems guaranteed — regardless of the species' continual wane in the wild. (Today, the only remaining wild fields of irises of any extent are found in Cameron Parish in the southwest corner of Louisiana.)

One might presume that plants as provocative as Louisiana irises might prove exceptionally difficult to cultivate. To the contrary. Although these irises are relative newcomers to general garden culture and the retail market, cultivation is relatively easy. Apparently, the severe nature of their natural habitats has genetically predisposed the plants for an unusually high tolerance to environmental conditions, including non-submerged habitats, and an amazing resistance to pests and diseases.

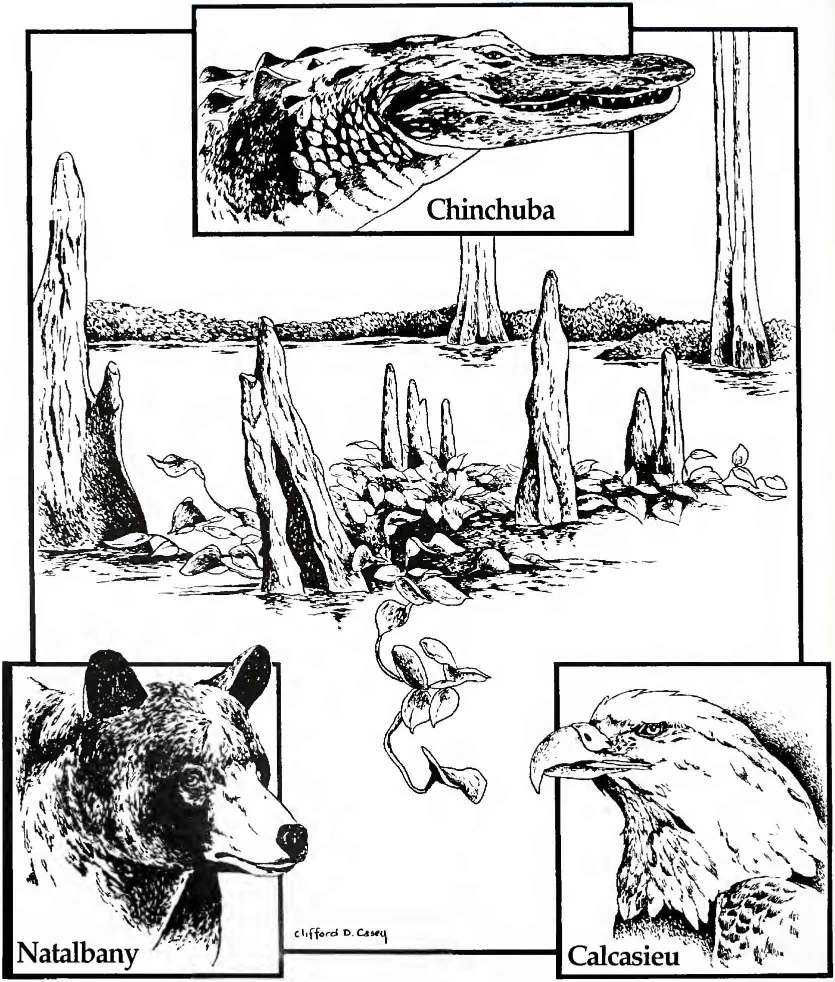
Iris aficionados can enjoy the glory of the unique floral dis-plants of Louisianas with adherence to but a few rules. First and foremost is moisture. For prolific blooms, plants must be systematically watered, particularly during summer and early fall, and rhizomes must be heavily mulched. Other requirements include lots of sun, slightly acidic soils containing high concentrations of organic material, and generous quantities of artificial fertilizers — particularly during fall.

For those landscapers interested in water gardens, Louisianas are, of course, a natural. Whether in a small container or an in-ground pool, the plants thrive. Crucial considerations are to keep water levels above the rhizomes no greater than 4 to 8 inches during the summer, but to drop the water to ground level each fall (this encourages seed germination and rhizome growth). If the garden is supplemented with other colorful aquatics, creative homeowners can extend the attractiveness of both their irises and gardens. ■

The use of irises in many Louisiana gardens recalls the vast iris fields that once made the lower Mississippi delta a kaleidoscope of colors.

Photo by Joseph K. Mertzewiller

NATIVE AMERICAN N



NES ACROSS LOUISIANA

BY PHYLLIS DARENSBOURG

Louisiana history is as colorful as its people and as famous as its food. Even though Spanish and French cultures dominate and accentuate our past, the Native American influence is every bit as significant, interesting and intriguing.

Native American dialects, for example, are as apparent in the bayou state today as in the 1500s when European explorers and settlers first began to describe their experiences and what they saw here. Many of the familiar names given to our bayous, rivers, lakes and towns originated in Indian languages and usually described wildlife, plants, animals and terrain. Both because of their historical context and because they are so descriptive, these names are invariably of great interest to those who love the outdoors and cherish our varied, though sometimes violent, heritage.

Time has molded Louisiana into a picturesque land of wooded hills, fertile river valleys, brooding cypress swamplands, shifting marshes and wildlife-rich hardwood forests. Many of the names given these areas by Native American people remain accurate and vivid today, and the tribes have left an indelible footprint in the sands of Louisiana history. Modern Louisiana springs forth from even the most superficial perusal of our past.

At the time of first European contact (Narvaez Expedition, 1524), at least three major languages were spoken in Louisiana. In the northwest, the Caddoan language was spoken by the Kadohadacho, Natchitoche, Yatasi, Adai, Doustioni and Washita tribes. Known as the Caddo Confederacy, these people may have been the first Native Americans (and Louisianans) encountered by DeSoto and company in 1541.

On the Gulf Coast, the Tunican language was spoken by tribes which included Chitimacha, Attakapa, Opelousa, Chawasha and Washa. The Koroa tribe in the northeast also spoke a Tunican dialect.

Along the Mississippi River, a Muskhogean language was spoken by Choctaw, Acolapissa, Taensa, Avoyel, Tangipahoa, Okelousa, Bayogoula and Quinipissa tribes.

Some other place names in Louisiana appear initially to be of French origin, like Calcasieu, or Bistineau, or Bayou Adois, but these names, and many like them, were taken originally from Indian languages.

From Avoyelles Parish to Tensas Parish, and from Bayou Chicot to the Tchefuncte River, Louisiana's past is very much alive in the present.

Here is a brief but interesting collection of some Indian place names and their meanings.

Abita Springs (Town)

Choctaw. From ibetap, meaning "fountain," "source," or "head of a water course."

Acadia (Parish)

From the word Acadian, an Indian word from the Micmac (Maine) language of the northeast meaning "place of bounty," or "where something abounds."

Atchafalaya (Bay, River, Swamp)

From Choctaw, meaning "long river."

Avoyelles (Parish)

"Flint people," or "people of the rock." This is the French spelling for the name of an Indian tribe. The Avoyel were mentioned by Iberville in the account of his early Louisiana expedition (1699).

Bayou Chicot (Lake, River, State Park)

This name comes from the French but is of Choctaw origin. The Choctaw word bok or bayuk means "stream," or "creek." Chicot is the French spelling for the Choctaw word meaning "sluggish."

Bayou Funny Louis (River)

Choctaw. From fani, "squirrel," and lusa, "black." "Black squirrel creek."

Bayou Funny Louis

Bistineau (Lake)

Caddo. From bastiano, meaning "big broth." The name is believed to stem from the foam and froth stirred up on the lake surface during storms.

Bogalusa (River, Town)

The Indian words mean "black creek," or "black stream." Bogalusa (Cassidy Park) is the site of the Louisiana Museum of Indian History.

Calcasieu (Lake, River)

This name is believed to be a French

spelling from the Attakapan meaning "crying eagle." Katosh means "eagle" and yok means "to cry." This name was given to an Attakapan war chief.

Chinchuba (Creek)

From Choctaw hachunchuba, meaning "alligator." Chinchuba Creek enters Lake Pontchartrain near Mandeville.

Kisatchie (National Forest, Town, Bayou)

This Indian name means "long cane."

Mississippi (River)

Algonquian for "large river." From misi, "big," and sipi, "river."

Natalbany (River)

"Lone bear." This river empties into Lake Maurepas.

Natchitoches (Parish, Town)

The name means "chinquapin eaters," or "chestnut eaters," and was given to a tribe of Caddo Indians. Situated on Cane River Lake, which was created by a shift in the Red River, this agricultural center is the oldest permanent settlement in the original Louisiana Purchase.

Ouachita (Parish, River)

The Indian name means "silver water." the river originates in Polk County, Ark., and is considered one of the most beautiful rivers in America.

Ponchatoula (Town)

From the Indian word for "falling hair," referring to Spanish moss, which is abundant in the area.

Shongaloo (Town)

From the Choctaw, shankolo, meaning "cypress tree."

Tangipahoa (Parish, River)

"Cornstalk gatherers." From the Choctaw word tanchipi, "cornstalk," and agua, "gather."

Tchefuncte (River)

From hacho fakti, Choctaw for "chinquapin." The chinquapin is a variety of scrubby chestnut whose nuts were widely used for food. The Tchefuncte River enters Lake Pontchartrain near Madisonville.

Tickfaw (River)

"Piney rest," or "piney retreat." From the Choctaw words tiak, for "pine," and foha, for "rest" or "ease."

Tunica (Town, Hills)

This name is taken from the tribe who inhabited the area in the 1700s. The Tunica Indians were noted for their trade in salt and horses with the French. ■

Editor's Note: Suggested reading for those with a zeal for state history is Louisiana Place Names of Indian Origin, by William Alexander Read.

Although the French explorer La Salle named Louisiana for King Louis XIV of France, nearly half of states in the United States were named in tribute to their Native American origins. They are: Alabama, Arizona, Arkansas, Connecticut, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, South Dakota, Ohio, Oklahoma, Oregon, Tennessee, Texas, Utah, Wisconsin and Wyoming.

Louisiana's native American past is very much alive in the present through place names such as Tunica, Tchefuncte River and Ouachita Parish. The drawing at right, which when viewed from a distance materializes into an American Indian, is symbolic of this weaving of the past and present.

Louisiana's National Hunting & Fishing Day

Saturday, September 23, 1995

Absolutely no alcoholic beverages allowed.

Participation Activities
(instructors present)
canoeing
fishing clinic
shooting (BB, skeet, muzzleloading)
archery target shooting
duck & goose calling clinic
duck calling contest
boating eduction

Demonstrations
archery hunting
bait casting
retrievers
firing of cannon net

Sept 23, 1995
NATIONAL HUNTING & FISHING DAY

Free Admission!
(Activities will vary by location)

Kids Fishing Contest
Bait furnished, limited poles available.

Purchase boat registrations, hunting & fishing licenses.

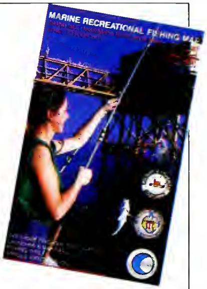
Free samples of Louisiana game and seafood dishes at tasting booths.

Statewide Locations

- Baton Rouge 504/765-2866
- Minden 318/371-3050
- Monroe 318/343-4044
- Natchitoches 318/221-5885
- Plaquemines Parish 504/646-6439

RIGS TO REEFS

FOURTH MARINE FISHING MAP NOW AVAILABLE!



The latest in a series of six coastal fishing maps is now available. Map 4 extends from Sabine Pass to White Lake and the surrounding Gulf waters. The first three maps are still available. Map 1 covers coastal waters from Venice to Fourchon. Map 2 extends from Fourchon to Point Au Fer. Map 3 shows the Chandeleur and Mississippi sounds, Lake Borgne and a Portion of Lake Pontchartrain. Each map is full-color and measures 25" x 38". Features illustrated include artificial reefs, oil and gas platforms and state/federal fishing line, plus tips for executing a successful fishing trip.

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LAW LINES

Behind the Badge

BY CAPT. KEITH LACAZE

September Dove Hunting and the Young Hunter

Tentative season dates and bag limits for the 1995-96 dove season were adopted at the July 6, 1995 regular monthly meeting of the Louisiana Wildlife and Fisheries Commission. The recommendations are as follows: Sept. 2-10, Oct. 21-Nov. 20 and Dec. 16-Jan.14; daily bag limit 12, possession limit 24. Shooting hours are one-half hour before sunrise to sunset except for Sep. 2-3, Oct. 21-22, and Dec. 16-17 when shooting hours will be noon to sunset.

The September segment of the dove season is the first gun season in the state. Dove hunts are popular social events with high hunter participation. Shooting over a dove field is the most unusual of sports in that it offers the number one challenge in shotgun marksmanship while providing the opportunity for everyone to get in on the action. Easy access to most fields along with little need for concealment or quiet make dove hunting a particularly good experience for children or novice hunters.

But dove hunting demands a high degree of safety awareness. A situation where multiple gunners are shooting in close proximity to one another requires careful planning and coordination. Young and inexperienced hunters need careful guidance for their own safety and the safety of others.

A well-planned hunt involves positioning gunners in a pattern which offers no chance of crossfire or downrange situations. On small fields, placing all hunters on a firing line along one side or boundary of the field works extremely well. Shots can be fired at birds entering the field from any direction and everyone gets a shot at doves brave enough to run the gauntlet of the line of gunners. It is amazing how many birds survive the trip unscathed. Firing at low-flying doves traveling between hunters on the firing line must be avoided due to the threat of crossfire.

On larger fields, hunters should be widely spaced and all shots at low flyers should be avoided. Positioning can easily be adjusted if a hazardous situation becomes apparent. Fine shot can be lethal at close range and at greater distances it can still cause injury, especially to the eyes. Good quality shooting glasses are a must for eye protection from possible debris from the hunters own gun and from stray shot.

Many young hunters accompany Dad or some other more experienced hunter on dove hunts. The seasoned hunter assumes the role of instructor with the enormous responsibility of teaching gun safety, ethical hunter conduct and sportsmanship. Make the outing a pleasant learning experience for the youngster by taking time to explain each phase of the hunt and allowing active participation. Many children who are still too young to fire a gun get a big thrill out of simply retrieving downed birds and carrying the game from the field. At the same time they are learning the ethical concept of making every effort to recover dead or wounded birds.

It may be necessary to shorten the length of the hunt so the young hunter doesn't lose interest or become overly tired. Weather on September hunts is almost always hot. A cooler with water, soft drinks and snacks will keep the young hunter comfortable and occupied during slack times when the birds are not moving. It is also handy for keeping harvested birds cool to avoid spoilage.

Beginners will need some coaching in order to hit fast moving doves. Throwing some clay birds for practice before the hunt is a great idea. It will also give dad time to be sure his young hunter can handle the shotgun and is not "overgunned."

Attending a Hunter Education course together in before the hunting season is a great idea for any parent-child hunting team. Safety, ethics, regulations and other hunting related topics are covered in the course and "youth model" shotguns are provided during the clay bird shooting phase. The course is the ideal refresher for experienced hunters and is required by law for all youngster buying their first hunting license.

Whether on a dove field in early September, in the hardwoods looking for squirrels or in deer or duck camp, bringing a young person into the hunting fraternity is one of the finest things a hunter can do for wildlife. Future generations will determine the fate of our wildlife resources. The steady decline in the number of hunters must be reversed if wildlife species are to continue to benefit from protection and management funded by the sportsman's dollar.

Perhaps equally important is the benefit we derive from the special bond created between parent and child who share the greatest experience of all, the great outdoors. ■

Dove hunting often occurs in fields located near homes or highways, making it imperative that hunters shoot only higher-flying birds.

Education Corner

NATURE INVESTIGATION

BY AMY OUCHLEY & GAY BRANTLEY

Have you ever wanted to become a detective? To sniff out clues? To search for facts? To uncover information that will help solve a puzzle or find the answer to a question? This is your chance to become a nature investigator.

What is a nature investigator? Nature is all the world around us that is not man-made (such as plants, animals, bayous, swamps, oceans). An investigator is someone who seeks information. Therefore a nature investigator is someone who seeks information about the world all around them.

Editor's Note: "Louisiana Nature Investigation" is designed to teach elementary children about this state's wonderful natural resources. It will be a regular feature and will cover all aspects of the outdoors.

Here are clues for your first investigation.

Read the clues, then fill in the blank in the question below. Pay close attention to the underlined words. You will find the definitions of these words in the glossary at the end of the activity.

1. Water is my home or habitat.
2. I am called an aquatic animal.
3. I use fins to swim.
4. I use gills to get oxygen from the water.
5. I prey on many different animals or I can become prey.

Can you guess who I am?

I am a ______________.

You did well on that first mystery. Now you are ready for another challenge. Use the code to decipher the names of fishes found in Louisiana.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

1. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___   ___ ___ ___ ___ are powerful swimmers
12 1 18 7 5 13 15 21 20 8   2 1 19 19 and fierce predators.

2. ___ ___ ___ ___ ___ ___ ___ have barbels (whiskers) that are sensitive and help this fish find food
3 1 20 6 9 19 8 in muddy water.

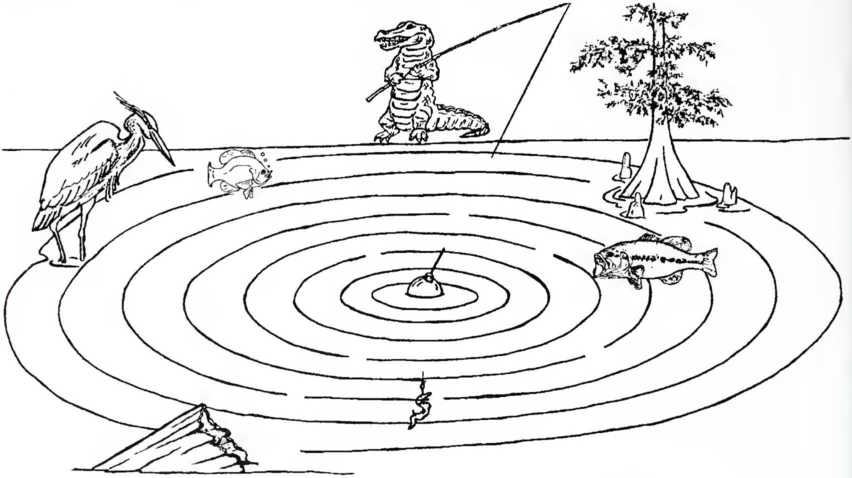
3. ___ ___ ___ ___ ___ is another name for bluegill and sunfish.
2 18 5 1 13

I'm a friend who will help you. My name is Slater and I'm a real sleuth.

4. The ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
1 12 12 9 7 1 20 15 18 7 1 18
is a long, slender fish with rows of large, sharp teeth for catching other fish.

5. The ___ ___ ___ ___ ___   ___ ___ ___ ___ ___ or
23 8 9 20 5   16 5 18 3 8
___ ___ ___ ___ ___ ___ ___ eat aquatic insects and small
3 18 1 16 16 9 5 fish and are good to eat.

You are a super detective. Now help Billy Bluegill find his way to the safety of the hollow log in this ripply maze.



HONE YOUR SENSES

The best way to become a better nature investigator is to practice using all your senses. You have five senses. They are the sense of *seeing, hearing, smelling, tasting,* and *touching.* Never taste or touch something you do not know. With your parent or an adult go to a place where you think fish might live. Look around. What would fish eat here? Where would they hide? Do you see an animal that might eat fish? What do you smell? Find some other animals that live near the water. Listen for the sounds of the animals you can not see. Make a list of some animals that you know live near the water, but you do not see. Now you are becoming a nature investigator....just like Slater.

GLOSSARY

Aquatic - growing or living in water.
Fin - a structure that helps fish move and balance in water.
Gill - an organ that allows an aquatic animal to breathe the dissolved oxygen in water.
Habitat - food, water, shelter, and space in an arrangement to meet the animal's needs.
Predator - an animal that kills and eats other animals.
Prey - an animal that is killed and eaten by another animal.
Sleuth - a detective, a tracker.

Meet me in November on the Louisiana Nature Investigation page.
See ya later ___________________ (fill in blank),

Slater

CONSERVATION notes

New WMA Created in Tensas Parish

A new wildlife management area containing almost 9,000 acres of prime wildlife habitat in Tensas Parish will open for public use this fall. Purchase of the new acreage, named Buckhorn WMA, was finalized in June at a cost of $8.3 million. Only a few miles separate Buckhorn WMA from Big Lake WMA, which is adjacent to Tensas River National Wildlife Refuge. The long-term goal is to connect Buckhorn and Big Lake through future purchases, providing a protected corridor of bottomland hardwood forest habitat for wildlife.

Basin Recovery Completed

Largemouth bass populations in the Atchafalaya Basin have fully recovered from damage caused by Hurricane Andrew in 1992. LDWF Inland Fisheries personnel attribute this successful recovery to timely stocking of adult and fingerling bass at carefully selected sites and protective size limits. From August 1992 until Dec. 1994, 7.9 million fish were stocked in the Basin, more than 1.1 million of them largemouth bass.

Artificial Reef Program Expands

Freeport McMoRan is donating a mile-long structure to the Louisiana Artificial Reef Program. The sulphur mine platform, located seven miles southeast of Grand Isle, will be the first of its kind installed in state waters and is very likely to be the largest artificial reef in the world. It will be placed in the water bottom in approximately 50 feet of water at its original location.

Authement Wins 1995 Secretary's Cup

Bill Authement's mount of two Louisiana bullfrogs in a cypress swamp setting was declared the winner of the 1995 Secretary's Cup for taxidermy art. Authement, who has one 90 national, regional, and state ribbons for his expertise, is the only Louisianian certified in mounting in all four taxidermy categories. His bullfrogs are on view in the main lobby of LDWF headquarters in Baton Rouge.

Hunting & Fishing Day Chairman Named

Louise Mandrell has been named the 1995 honorary chairman for National Hunting & Fishing Day, scheduled for Sept. 23, 1995.

Mandrell, an avid outdoorsman who enjoys hunting and fishing, will encourage the public to take part in traditional outdoor pastimes and spread word about contributions made to wildlife conservation by hunters and anglers.

National Hunting & Fishing Day was established by Congress almost 25 years ago to recognize hunters and anglers for their contributions to wildlife conservation.

"National Hunting & Fishing Day was created to remind us all that sportsmen and sportswomen are at the forefront of preserving our country's outdoor heritage for our children," Mandrell said.

Various activities to celebrate NHFD have been planned in Louisiana by the Department of Wildlife and Fisheries. See page 29 for more information.

Acreage Added to Tunica Hills WMA

LDWF purchased 420 acres of wildlife habitat in West Feliciana Parish, adding to the 2,945 acres comprising Tunica Hills WMA. The $249,000 sale was finalized in March.

Lifetime Licenses

LeBlanc, Murphy	Pierre Part
McKinney, Aaron	Port Allen
Montgomery, Christopher	Bastrop
Morris, Ted	Alexandria
Ourso, Brad	White Castle
Paxton, Michael	Port Allen
Posey, Milford, III	Maurepas
Powell, Charles Jr.	St. Francisville
Robinson, Brad	Gonzales
Schmidt, Gilbert III	Destrehan
Scott, Dean	Kenner
Stickell, Jason	Alexandria
Thistlethwaite, Leigh	Washington
Walk, Mary Kay	New Orleans
Walk, Wesley	New Orleans
Watts, Jeffery	Albany
Watts, Michael	Albany
Wheat, Brandon	Denham Springs
Williams, Christopher	Noble
Benoit, Larry J.	Lafayette
Bergeron, David L.	Kenner
Billeaud, Brennan J.	Lafayette
Billeaud Stuart F.	Lafayette
Blanchard, Corey W.	Raceland
Bordelon, Dennis J.	Slidell
Brignac, Ryan M.	Lutcher
Broussard, Trey E.	Sulphur
Campbell III, John S.	Baton Rouge
Castello, Bobby D.	Ethel
Chilimigras, Elizabeth J.	Pearl River
Chilimigras, John J.	Pearl River
Dauqereaux III, Thomas E.	Sulphur
Dean, Brandon M.	Baton Rouge
Falterman, Anthony G.	Napoleonville
Frazier, Keith M.	Amite
Frye, John C.	Minden
Henning, Tim R.	Mandeville
Hummel Jr., Ronald K.	West Monroe
Lafleur, Kendall C.	Opelousas
Lapoint, Carl J.	Lafayette
Lirette, Brandon M.	Chauvin
Lirette, Robert H.	Chauvin
Machen, Walter O.	Minden
Marcello Jr., Michael J.	Mathews
Martin, Brad M.	LaPlace
Moresi, Casey J.	New Iberia
Morgan, Gary D.	Sarepta
Morvant, Benton J.	Thibodaux
Moss, Eric H.	Delcambre
Reneau, James D.	Monroe
Richard, Michael P.	Raceland
Robinson, Christopher W.	Bastrop
Salazar Sr., John R.	Shreveport

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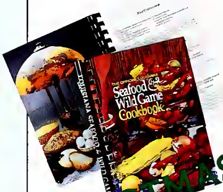
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Bayou Kitchen

BY WAYNE MILLER

Photo by Ken Glaser

Gulf Trout Parmesan

6 fillets of trout
2 cups of bread crumbs
⅓ cup of parmesan cheese, grated
½ cup finely chopped parsley
1 teaspoon paprika
½ teaspoon leaf oregano
½ teaspoon leaf basil
Salt and pepper to taste
¾ cup melted butter or oil
Lemon wedges

Clean and dry trout. In a large bowl combine bread crumbs, grated cheese, parsley, paprika oregano, basil, salt and pepper. Dip fish fillets in melted butter and dredge in bread crumb mixture. Arrange in oiled baking dish. Bake in hot 375 degree oven for 20 to 25 minutes or until fillets flake when fork tested. Remove from oven. *Do not over bake.*

Serve with yellow or saffron rice and lemon garnish. (serves 6)

Shrimp Salad Orleans

1½ pounds shrimp (cleaned and deveined)
¾ cup medium sherry
2 cloves garlic, finely chopped
½ cup green onions, chopped
2 tablespoons olive oil
1 tablespoon lemon juice
¾ cup chicken stock
Dash cayenne pepper
¾ cups water

Clean shrimp. Combine wine, oil, chicken stock, and water with garlic, onions, lemon juice. Add salt and cayenne pepper to taste. Bring to full boil in large saucepan. Add shrimp and return to boil. Remove from heat. Cover saucepan and allow to stand and cool for 20 minutes. Remove shrimp and refrigerate shrimp for 1 hour or longer. Arrange cold shrimp on lettuce. Serve with mayonnaise and lemon. (serves 6)

Banana Pecan Loaf

2 cups butter, softened
1 cup sugar
½ cup dark brown sugar
2 eggs
2 cups flour
1 teaspoon baking soda
¼ teaspoon salt
3 large bananas, smashed
1 cup pecans, chopped

Blend butter and white and brown sugar; add eggs. Mix. Then combine flour, baking soda, and salt together. Add flour mixture to butter, sugar and egg mixture. When blended, add bananas and pecans. Turn into prepared loaf pans and bake in 350 degree oven for about 55 minutes. Allow loaves to come to room temperature before cutting.